

associated with provision of comprehensive COPD care and what perceived barriers to comprehensive care are.

**Methods:** An online survey was disseminated to 5,805 pharmacists registered with the Alberta College of Pharmacy. Survey questions collected demographic information, current practices and barriers to provision of comprehensive COPD care. Data analysis was performed using descriptive statistics and multivariable logistic regression.

**Results:** We received 456 responses, with 341 being fully completed (denominators differ based on item response). The following comprehensive services were provided: assessment of appropriateness of maintenance therapy based on guidelines (46.3%), initiation of maintenance therapy (28.9%), referral for optimization/step-up therapy (79.9%), and initiation of prednisone/antibiotic in exacerbation (21.6% and 25.3%). The model showed statistically significant differences in: referral for step-up therapy - those with no additional education in COPD had higher odds and those with authority to prescribe had lower odds; initiation of maintenance therapy - casual pharmacists had lower odds; initiation of exacerbation therapy - casual pharmacists had lower odds and those with certification (eg CRE) had higher odds. The most impactful barriers were workload, resources, or time pressures (56%), lack of training and knowledge in COPD management (31.6%) and belief that there are other healthcare providers better positioned to assess and adjust therapy (27.6%).

**Conclusions:** Less than half of respondents assess appropriateness of COPD therapy, which is an opportunity for pharmacist care as substantial number of patients are not optimally managed. Pharmacists can be more proactive in caring for patients with COPD as well as in ensuring timely exacerbation management. More training and implementation strategies supporting pharmacists at the workplace are needed to improve COPD management.

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#### Abstract 179

##### Availability of Clinical Services in Community Pharmacies: A Survey of Utah Pharmacists

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**Background:** The majority of Americans live within 10 miles of a community pharmacy, making pharmacies one of the most accessible avenues to receive healthcare. In addition to medication dispensing, community pharmacies have slowly expanded to providing services. The objective of this study was to examine the availability of clinical services in community pharmacies across the state of Utah (USA) as well as assess the barriers to offering these services.

**Methods:** We conducted a survey using an online platform (Qualtrics, Provo, UT) of all registered and active pharmacists practicing in community pharmacies in the state of Utah. The questionnaire gathered demographic data as well as information on the availability and barriers to pharmacy services. We specifically examined naloxone dispensing, emergency and pharmacist-prescribed hormonal contraception, smoking cessation counseling, and immunizations. Descriptive statistics were used to characterize the study population and their responses. Data were analyzed in SAS v9.4 (SAS Institute, Cary, NC). This study was reviewed and deemed exempt by the University of Utah IRB.

**Results:** Of the 5510 emails sent, we received 570 responses, 205 (3.7%) of which fully qualified and completed the questionnaire. Of the 205, 84 (41%) identified as female or a woman, 114 (56%) were between the ages of 31 and 50, 168 (82%) identified as white, 68 (33%) reported living in a rural area, and 50 (24%) reported their highest level of training was a BS Pharm with the rest reporting a PharmD. Of the respondents, 177 (86%) offered naloxone, 150 (73%) offered emergency contraception, 90 (44%) offered pharmacist-prescribed hormonal contraception, 94 (46%) offered smoking cessation counseling, and 188 (88%) offered immunizations. The most frequently cited barriers to offering services were time constraints and insufficient/lack of reimbursement.

**Conclusions:** The availability of clinical services at Utah pharmacies varies considerably. To expand these services' availability, workflow and reimbursement policy changes are necessary.

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#### Abstract 181

##### Exploring methods for Identification of Medication-Related Hospital Admission/Readmission: A systematic review

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**Background:** Medication related hospital admissions and readmissions are a common occurrence. Pharmacist interventions can be targeted towards these admissions to reduce further readmissions, however there is no clear consensus on how to identify a medication related admission/readmission. This systematic review aims to summarise published evidence on the different tools employed to identify medication related admissions/readmissions.

**Methods:** Scopus, PubMed and Embase Ovid database searches were conducted to collect articles for this systematic review. Full text articles in English were included if they were published in the past ten years and focused on the development of a tool for identification of medication related hospital admission/readmission. Articles were excluded if they were systematic reviews, conference papers, editorials or commentary, or described the use of an existing tool or consensus.

**Results:** Twenty-two studies were identified that described unique methods for identifying medication-related admissions. These methods included trigger tools and indicators (n=8), questionnaires (n=4) and author-selected ICD-9 or ICD-10 codes (n=10). QUDAS-2 was employed to evaluate the risk of bias in tools that described both an index assessment using the tool and compared that to a reference standard, primarily expert opinion or consensus (n=4).

**Conclusions:** Of these four tools, three were considered suitable for use by clinical pharmacists in identifying medication related admissions/readmissions. The fourth tool was a computerised algorithm which we do not have access to use for replication. Future research could be focused on validating a tool for use in the general population as all tools were validated in either a geriatric or paediatric population.

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#### Abstract 186

##### Coordinating pharmacists in Flemish nursing homes: a new and promising role

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**Background:** So far, coordinating and advising pharmacists (CAPs) have not been officially introduced in Flemish nursing homes (NHs), although NHs perceive a high need for support in all medication-related processes. To break the vicious circle of waiting for the government, which in turn awaits evidence of effectiveness on CAPs' role, we started a pilot project in which we trained pharmacists to be a CAP, and we further explored their potential role in the NH.

**Methods:** The pilot project was set up in 2022-2023 with 10 pharmacists and NHs. Participants followed an educational program developed by KU Leuven. To evaluate the training and explore the activities, focus groups were organized with participating CAPs and NH staff. CAPs also listed tasks and learning activities. All data were analyzed inductively.

**Results:** The training program consisted of three components: 1) e-learning, 2) 10-days internship including three assignments (i.e. quality assessment of the medicines' pathway, medication reviews using the RESPECT brochure, and dialogues with NH residents (NHR) about the medication-processes) and 3) monthly round tables with CAPs and training coordinators. Findings showed that the e-learning was well received, but needed further adaptations. The internship was defined as an essential component; round tables were considered as